

## \* Expressions

- An Expression is a combination of values, variables and operators.
- ↳ A value all by itself is considered an expression, and so is a variable <sup>and following</sup> are all legal expression.

Ex:  $a+b=5$

- An expression is any valid combination of operators, literals and variables.

## \* How to create an Expressions:-

Python expressions only contain identifiers, literals and operators.

- ↳ Identifiers:- Any name that is used to define a class, variable or object is an identifier.
- ↳ Literals:- There are language independent terms in Python.
- ↳ Operators:- Operators are special symbols in Python.

## Types of Expression :-

1. Arithmetic expressions.
2. Relational expressions.
3. String expressions.
4. Logical expressions.
5. Compound expressions.

### 1 Arithmetic Expressions :-

Arithmetic expression involve numbers and arithmetic operators.

for example :-

$$x_1 = a + b * c$$

$$a = 4$$

$$b = 5$$

$$\text{sum} = a + b$$

print(sum)

- ### 2 Relational expressions :- It is also known as Boolean expression.

→ Combination of valid operands and relational operators is known as Relational expression.

example :-

$$a < b$$

$$a + b > 2$$

### 3 Logical expressions:-

It combine two OR more relational expressions and produce bool type results.

example:  $x > y$  &&  $x == 10$

$x == 10$  ||  $y == 5$

### 4 String Expressions:-

An expression having any valid combination of string operators (+ and \*) and string operands is known as string Expression.

$name = "palvi" + "Flora"$

### 5 Compound Expressions

An expression having more than one expression is known as compound expression.

$x > 10$  and  $y == 20$